

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A fuel injection valve comprising:

a valve section comprising:

a cylindrical moving iron core that reciprocates in an axial direction in response to a fuel injection signal;

a valve element integrated with said moving iron core at one end and provided with a valve seat at the other end;

a valve main body in which the valve element is accommodated; and

a plate provided with orifices that are opened and closed as said valve seat comes in contact with and moves away from a valve seat face of the valve main body; and

a solenoid section comprising:

a cylindrical stationary iron core disposed facing said moving iron core in said axial direction;

a cylindrical yoke disposed on an outer circumference of said moving iron core;

a non-magnetic metal sleeve ~~where~~ that joins said stationary iron core and said yoke ~~are joined~~ into one body by welding;

a housing forming a magnetic loop with said stationary iron core, moving iron core and yoke;

a coil that is disposed on the outer circumference of said stationary iron core and gives axial electromagnetic attraction to said moving iron core; and

a compression spring urging said valve element toward said plate;

wherein said moving iron core is provided with a radial recess ~~of a predetermined width and a predetermined depth~~ on the outer circumference of the moving iron core at a position facing a magnetic characteristic change portion produced in said yoke due to heat generated when said sleeve and said yoke are welded together,

wherein said yoke and said sleeve do not protrude into said radial recess.

2. (original) The fuel injection valve according to claim 1, wherein said valve element of which one end is integrated with said moving iron core is made of a magnetic material.